

WEATHER

Objectives	Activities	Days
<p>7th Grade GLE: Strand 5.2.F.e- e. Collect and interpret weather data (e.g., cloud cover, precipitation, wind speed and direction) from weather instruments and maps to explain present day weather and to predict the next day's weather</p>	<p>1.1 Introduce weather data and weather journals. 1.2 PowerPoint for student note taking. ★ 1.3 Discuss Cloud types 1.3 Students will make barometers and anemometers to use for their weather journals. 1.4 Assessment- Students will record weather data into their weather journals daily. It will be collected at the end of the unit.</p> <p>Sources: Weather data- http://www.weatherwizkids.com/weather-forecasting.htm Clouds- http://www.eo.ucar.edu/webweather/cloudhome.html Barometers - http://www.wikihow.com/Make-a-Simple-Weather-Barometer Anemometers - http://www.weatherwizkids.com/experiments-anemometer.htm</p>	<p>Unit</p>
<p>7th Grade GLE: Strand 1.1.D.a- Describe the relationship between temperature and the movement of atmospheric gases (i.e., warm air rises due to expansion of the volume of gas, cool air sinks due to contraction of the volume of gas)</p> <p>7th Grade GLE: Strand 1.2.C.a- Identify solar radiation as the primary source of energy for weather phenomena</p> <p>7th Grade GLE: Strand 5.1.C- a. Describe the composition of the Earth's atmosphere (i.e., mixture of gases, water and minute particles) and how it circulates as air masses b. Describe the role atmosphere (e.g., clouds, ozone) plays in precipitation, reflecting and filtering light from the Sun, and trapping heat energy emitted from the Earth's surface</p> <p>7th Grade GLE: Strand 5.2.F.- f. Describe the significant changes in temperature and barometric pressure may cause dramatic weather phenomena (i.e., severe thunderstorms, tornadoes, hurricanes)</p>	<p>2.1 Introduce temperature and atmospheric gases with hot air raises. 2.2 PowerPoint for student note taking. ★ 2.3 Introduce Solar radiation, Earth's atmosphere, and weather phenomenon with what causes weather. 2.4 PowerPoint for student note taking. ★ ★ 2.5 Assessment- students will work with partners to research weather phenomenon and determine what weather factors contribute to the phenomenon. (Thunderstorms, Tornadoes and Hurricanes). Students will then use their research to create a 2-3 slide PowerPoint presentation to share with the class.</p> <p>-Thunderstorm -Tornadoes -Hurricanes</p> <p>Sources: Hot air- http://scienceforkids.kidipede.com/physics/weather/hotairrises.htm What causes weather- http://www.weatherwizkids.com/weather-climate.htm Weather- http://www.weatherwizkids.com/index.htm</p>	<p>6</p>

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<p>7th Grade GLE: Strand 5.2.F.- a. Explain how the differences in surface temperature, due to the different heating and cooling rates of water and soil, affect the temperature and movement of the air above b. Describe the characteristics of air masses (i.e., high/low barometric pressure, temperature) and predict their effect on the weather in a given location</p>	<p>3.1 Introduce the difference in the temperature of land and water with kids geo. 3.2 PowerPoint for student note taking. ★ 3.3 Group Weather Prediction Worksheet. 3.4 Assessment-Individual weather predictions. ★</p> <p>Sources: Land vs. Water- http://www.kidsgeo.com/geography-for-kids/0077-land-and-water-effect-temperature.php</p>	2
<p>7th Grade GLE: Strand 5.2.F.- c. Identify weather conditions associated with cold fronts and warm fronts d. Identify factors that affect weather patterns in a particular region (e.g., proximity to large bodies of water, latitude, altitude, prevailing wind currents, amount of solar radiation, location with respect to mountain ranges)</p>	<p>4.1 Introduce Cold and Warm fronts 4.2 PowerPoint for student note taking ★ 4.3 Introduce Weather patterns 4.4 PowerPoint for student note taking ★ 4.5 Assessment - Weather factors worksheet</p> <p>Wild Weather Adventure: http://www.weatherwizkids.com/weather-games.htm</p>	3
<p>7th Grade GLE: Strand 5.2.F.- g. Differentiate between weather and climate. h. Identify factors that affect climate (e.g., latitude, altitude, prevailing wind currents, amount of solar radiation)</p>	<p>5.1 Weather vs. Climate. 5.2 PowerPoint for student note taking. ★ 5.3 Factors that affect Weather/Climate Venn Diagram. ★ 5.4 Weather Jeopardy 5.5 Assessment- Weather Unit Quiz ★</p>	3